Progress in State and Local Surveillance Capacity: How do we measure the impact of NEDSS and PHIN?

PHIN Conference

May 11, 2005

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Surveillance Funding History

- **50 states, 6 cities funded for NEDSS: 43 started with Assessment & Planning phase in September 2000**
- **NEDSS ELC awards FY 2001-2005**
- **September 2002, 2003, 2004: Public Health and Social Services Emergency Fund provides >$1 billion for state and local public health preparedness capacity**
  - **guidance from CDC and HRSA to use PHIN standards for IT investments**
  - **Guidance explicitly includes NEDSS as part of surveillance**

Are we there yet?

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What can NEDSS do that will improve public health surveillance?

- More timely detection via E**lectronic laboratory results** reporting (ELR) from clinical diagnostic laboratories
  - For pre-defined public health results, electronic message to health department **automatically sent**
  - Message includes structured data including test, result, provider ID, patient age, sex
  - Multi-jurisdiction labs, public health labs, some local labs
- **Web data entry**: case information available to local & state health departments immediately on entry (no paper, no mail)

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What can NEDSS do that will improve public health surveillance?

- Support case investigation by state and local health dept
- Share lab results **electronic**ally between state **public health lab** & state surveillance
- Send standardized data electronically to CDC
- Same application for over 140 diseases, replace disease specific “stovepipe” applications
- Integrate with other PHIN components

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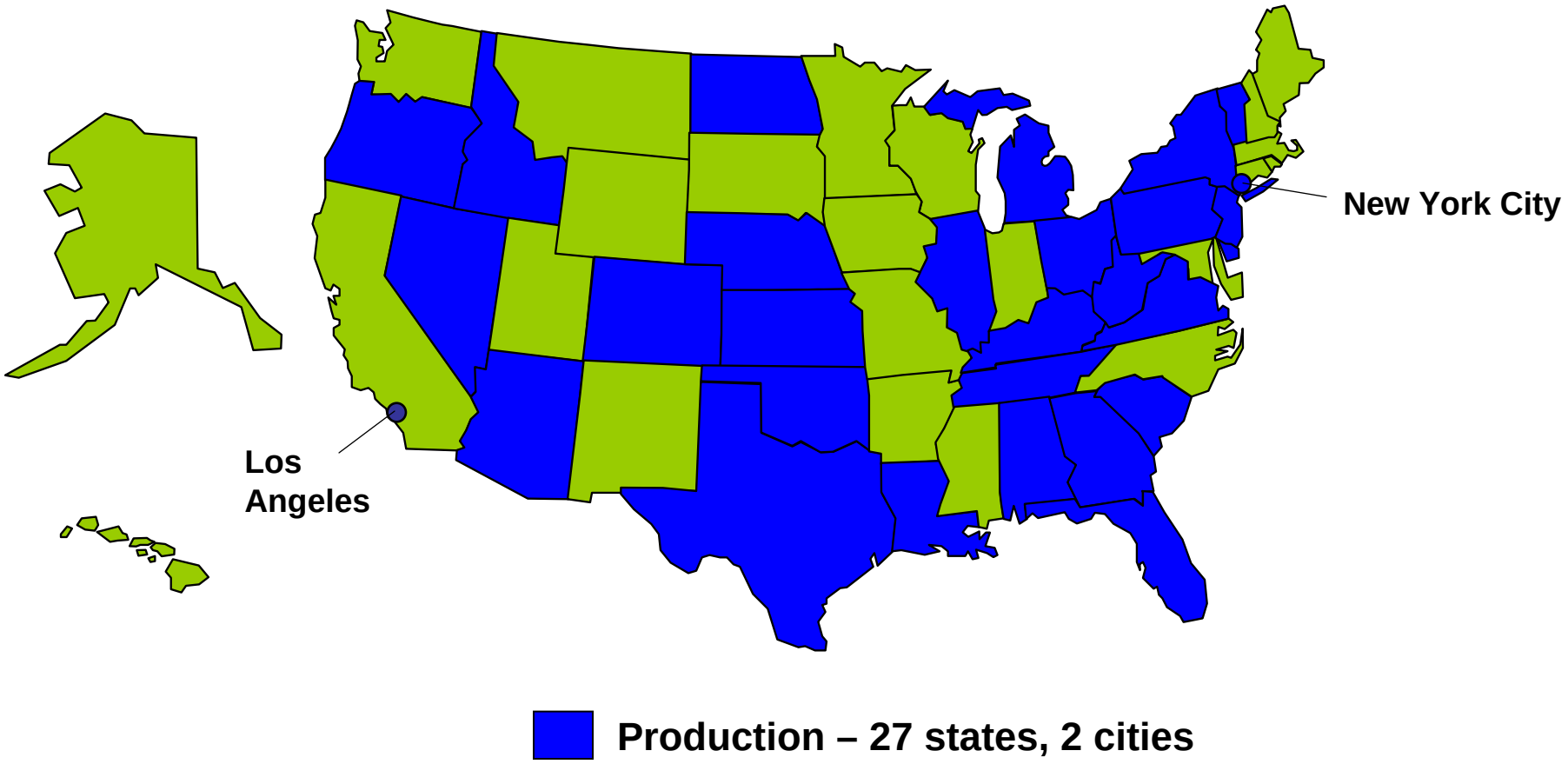
Status of NEDSS surveillance enhancements April 2005

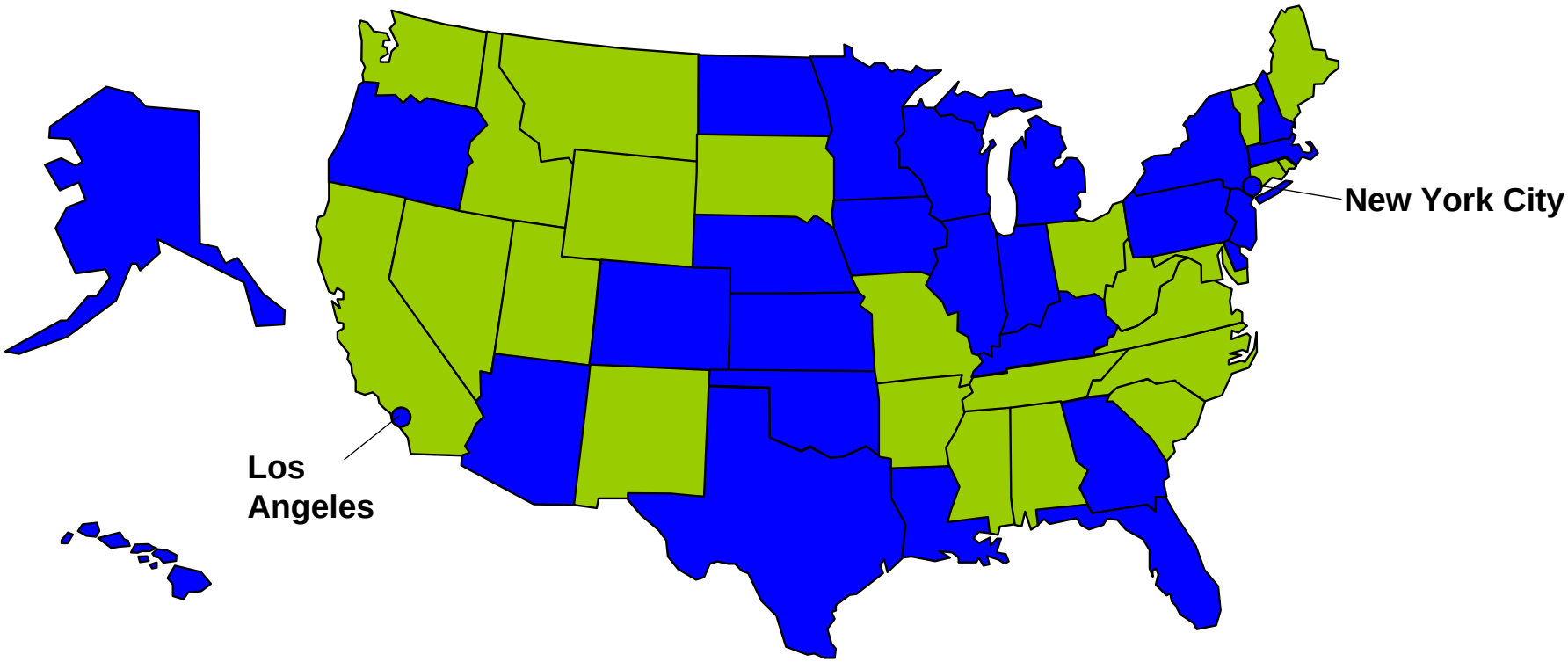
Grantee capacity	Impact on disease reports	In daily use	Develop or deploy	planning
Capacity for web data entry	More timely	29*	12	15
Electronic Lab Reporting (excludes lead only)	More timely More cases	28	14	12

***application in use: 1 commercial (3 states); NEDSS Base System (10 states); custom (16)**

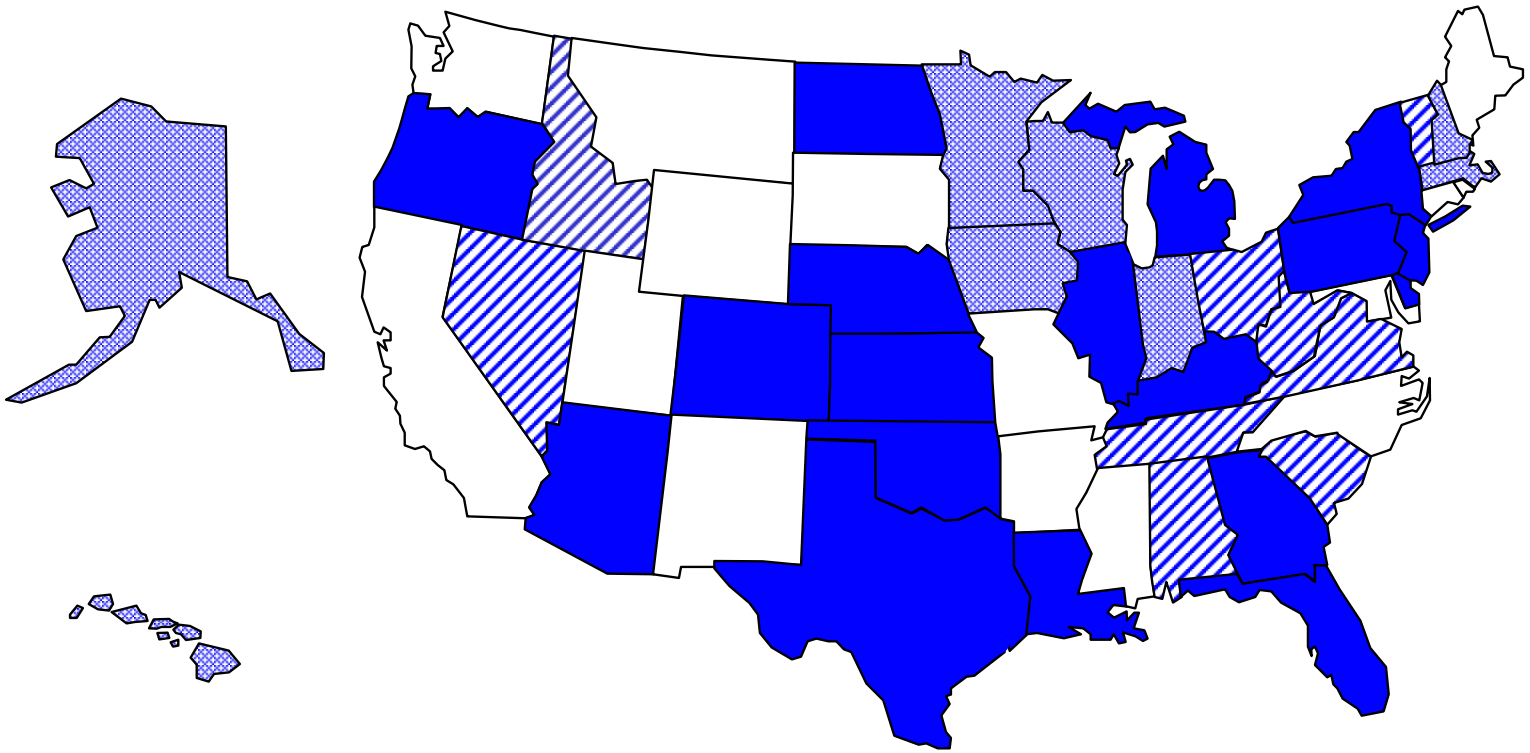
Surveillance using browser-based data entry over the Internet, April 2005



Electronic Laboratory Results Reporting, April 2005



State NEDSS Surveillance Functions, April 2005



Surveillance using web-based data entry - 9

Electronic Laboratory Reporting - 8

Both - 18

Critical Issue-1

- **Continuity and accountability of support for state PHIN surveillance systems**
  - **State NEDSS/PHIN grant funding**
    - **Objective—preserve core state leadership for integrated surveillance/PHIN**
    - **Average award $200,000**
    - **CDC Staffing—grants management, IT AND public health Technical Assistance, liaison with CDC programs**
  - **Need for active engagement with state public health preparedness awards**
  - **Maintenance of NEDSS budget line for state and local PHIN surveillance until meet defined level of functionality**
    - **Amount (FY 2005: $24.7 million)**

Critical Issue 2

- **Accelerate electronic lab result reporting capacity**
  - **Bring more states on line**
  - **Add labs in addition to LabCorp-- Quest, Mayo sending test messages into CDC test system—ARUP in discussions**
  - **Policy coordination with stakeholders– states, multi-jurisdictional laboratories, routine surveillance, Biosense,**
    - **IEC/CIC Data Standards Working Group is working on policies for ELR standards implementation**

Critical Issue 3
Maintain, enhance, & evolve NBS

- **NEDSS Base System 1.1.4**
  - **Continued systematic approach for end user input—Danos leading Change Management Panel process**
  - **Maintenance, enhancements continue**
- **NEDSS/PHIN deployment**
  - **Integrated approach to PHIN deployment**
  - **Application Service Provider (ASP) model**
    - **4 states have requested pilot with NBS**

Critical issue 4

- **For PHIN/NEDSS compatible systems, ability to send PHIN notifiable disease message to CDC**
  - **“tools” needed: version 3 implementation guides, STF, V3 message receiver, pilot implementation(s), certification (workshop 5/13; PHIN conference presentations)**
  - **Once “tools” are available, develop policy jointly on target date by which states are transmitting data (either from state system or NBS)**

Critical issue 5

- Urgent need for additional program areas (TB, lead, STD, HIV, stroke, violent death)
- NCPHI will be presenting plan at PHIN conference for transition to new architecture for surveillance information systems
  - add new program areas more rapidly
  - integrate with either NBS or state PHIN compatible systems

Critical Issue 6

- Ability of states and CDC programs to fully utilize data collected via NEDSS
  - PHIN Analysis, Visualization, and Reporting (AVR) user group led by Lesliann Helmus, VA DOH, has made dramatic progress in sharing state and CDC work on new datamarts
  - Resources needed for optimal use of information by all types of users

Critical issue 7

- Accelerate PH lab participation in PHIN
  - Encourage funding of PHIN compliant Laboratory Information Management Systems (LIMS) by OTPER, NCID, states
  - Assure messaging technical assistance to connect PH labs

How can local and state health departments accelerate their participation in PHIN surveillance ?

- Systems are complex and expensive: be strategic about approach that can be supported
  - "must have" vs "nice to have" functionality
  - Develop vs acquire
  - Application Service Provider (ASP) option to minimize need for local technical support capacity
- Use deployment process to examine business processes, integration with other PHIN and state systems
- Systems are highly configurable – commit time to configure!

How will local and state health departments define success with NEDSS?

- Increased completeness & timeliness of reporting?
- Earlier detection of outbreaks?
- Faster response?
- Better informed policy?
- Decreased data entry burden—for health department? For partners?
- Easier to track and manage workflow?
- Increased analysis capacity for state and local personnel?
- Integration with other key state health information systems—alerting, outbreak investigation?